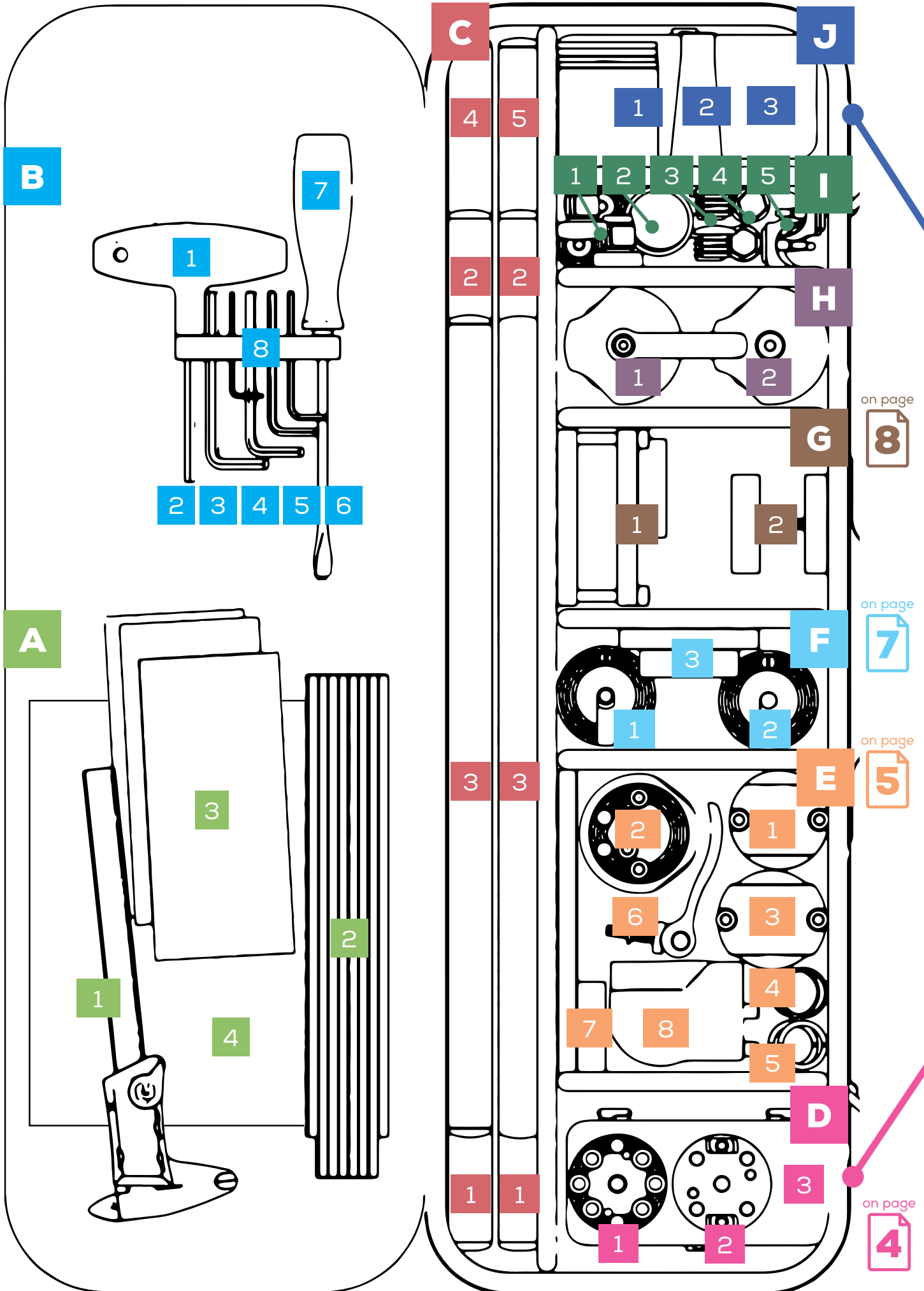


Instructions Manual

M3D Service Kit

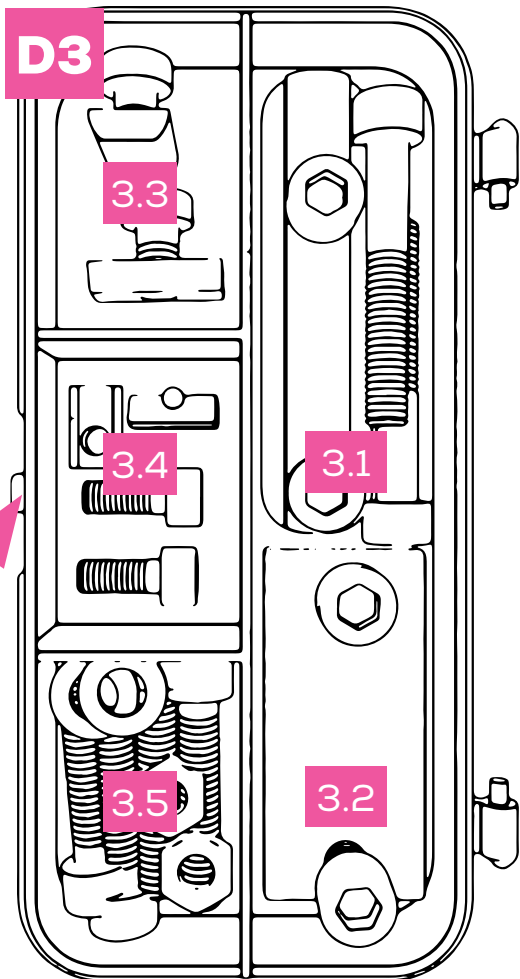
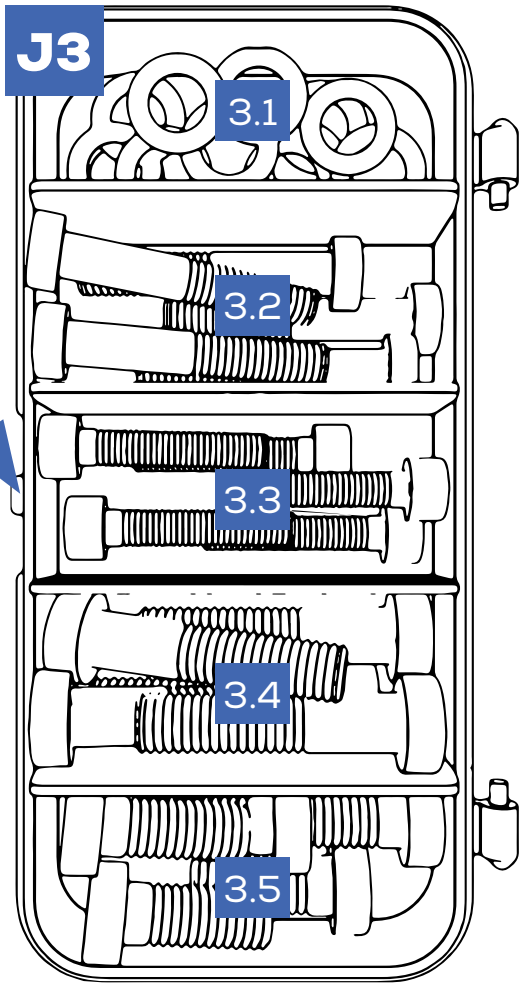


M3D Service Kit



Bag Content & Order Sheet

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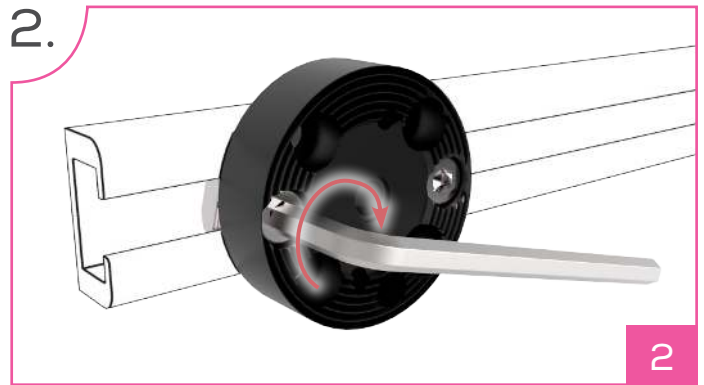
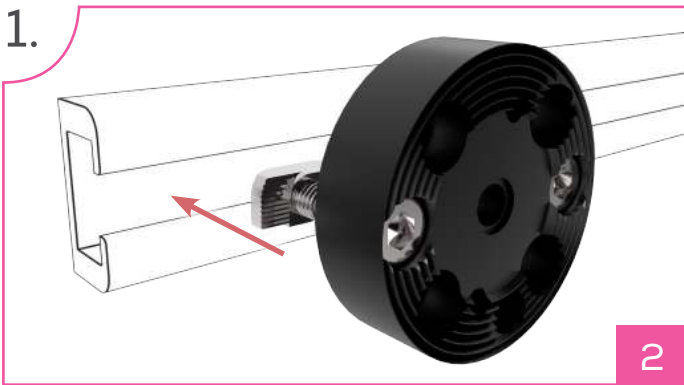


ID	Part No.	Name	Quantity	Reorder
A 1	01.0032	Caliper	1	
A 2	01.0045	Yardstick	1	
A 3	00.4016	Post-It	3	
A 4	00.5108	Manual	1	
B 1	01.0027	T-Handle	1	
B 2	01.0002	Allen Key 3 mm	1	
B 3	01.0029	Allen Key 4 mm	1	
B 4	01.0014	Allen Key 5 mm	1	
B 5	01.0437	Allen Key 7/32"	1	
B 6	01.0436	Allen Key 3/32"	1	
B 7	01.0435	Screwdriver	1	
B 8	01.0874	Wrench Holder	1	
C 1	01.5005	Tube Ø22,2x200	2	
C 2	01.5010	Tube Ø22,2x300	2	
C 3	01.5020	Tube Ø22,2x400	2	
C 4	01.5030	Tube Ø22,2x500	1	
C 5	01.5032	Tube Ø22,2x600	1	
D 1	11.1074	M3D Adapter Ring	1	
D 2	11.1069	T-Nut	1	
D 3	02.0006	Box (Large)	1	
D 3.1	11.1069BS2	T-Nuts for 16/9	1	
D 3.2	11.1066BS1	T-Nuts for 23/7	1	
D 3.3	11.1077BS1	T-Nuts for 10/4	1	
D 3.4	11.1072BS2	Item P5	1	
D 3.5	11.1074BS1	Screw Set Adapter	1	
E 1	11.1125	RKL-25	1	
E 2	11.1425	RKL-T25	1	
E 3	11.1130	RKL-30	1	
E 4	01.2522	Sleeves 25>22	2	
E 5	01.2519	Sleeves 25>19	2	
E 6	11.1260	Replacement Kit	1	
E 7	11.1062	RKL Rad Per Uni	1	
E 8	11.1590	Base Adapter 90°	1	
F 1	11.1525	Spacer 25mm / 1"	1	
F 2	11.1538	Spacer 38mm / 1.5"	1	
F 3	11.1075	RKL-M8-Mini	1	
G 1	11.1060	E30-70	1	
G 2	11.1065	E30	1	
H 1	11.1350	Uni-Joint QS	1	
H 2	11.1300	Uni-Joint	1	
I 1	01.5500	Slip-Out-Safeguard	2	
I 2	01.0109	Bushing FloatArm	1	
I 3	01.5999	Ribbed Inserts Ø22	4	
I 4	01.0283	FS Bolthead Cover	4	
I 5	01.0106	Foot for TS-XL	4	
J 1	01.0078	Alcohol Wipes	6	
J 2	04.0012	OKS Lubricant	1	
J 3	02.0005	Box (Small)	1	
J 3.1	01.0394	Washers	20	
J 3.2	01.0634	Bolts M6x35	5	
J 3.3	01.0520	Bolts M5x20	5	
J 3.4	01.0835	Bolts M8x35	5	
J 3.5	01.0820	Bolts M8x20	5	

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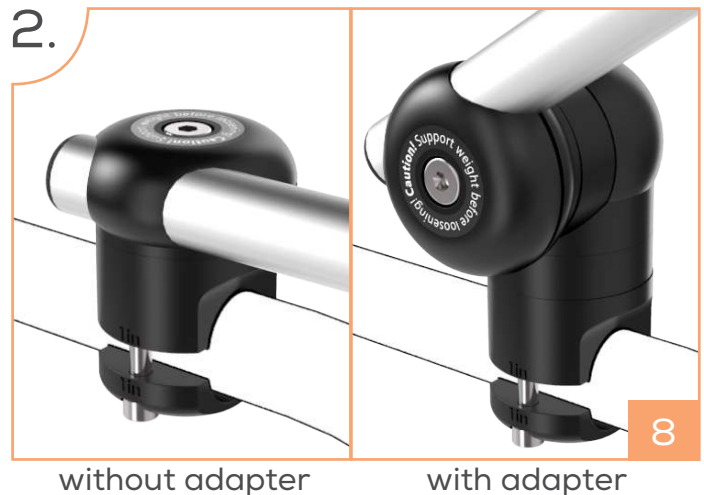
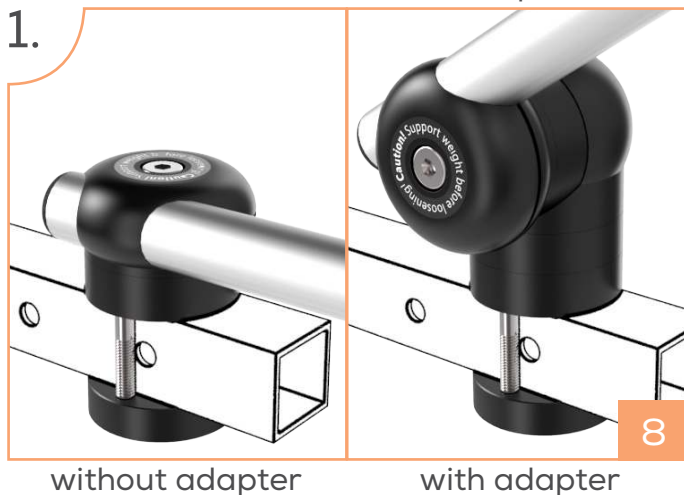
D

Base clamp for T-nut rails

**E**

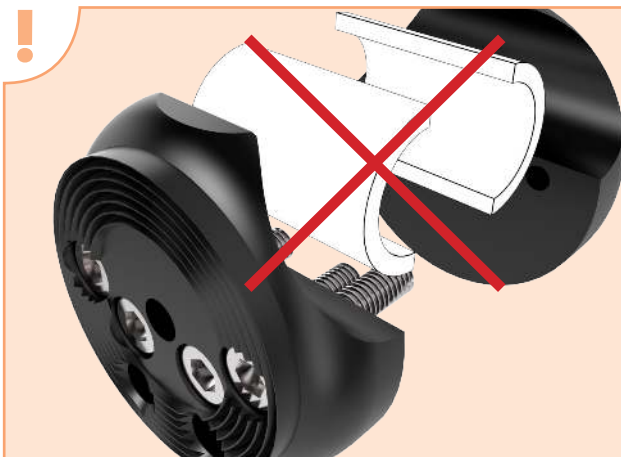
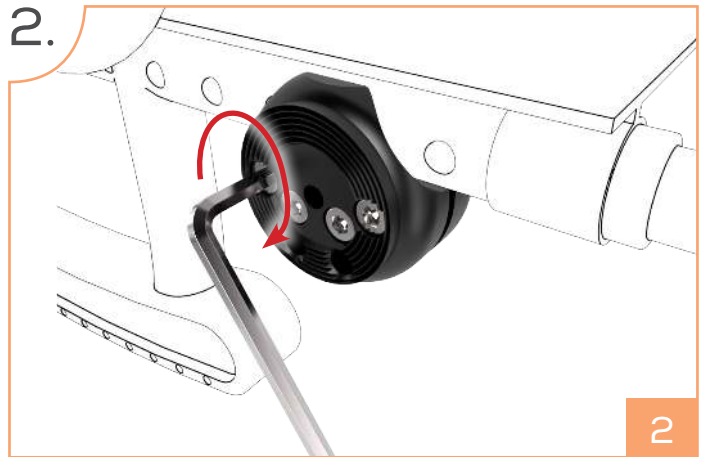
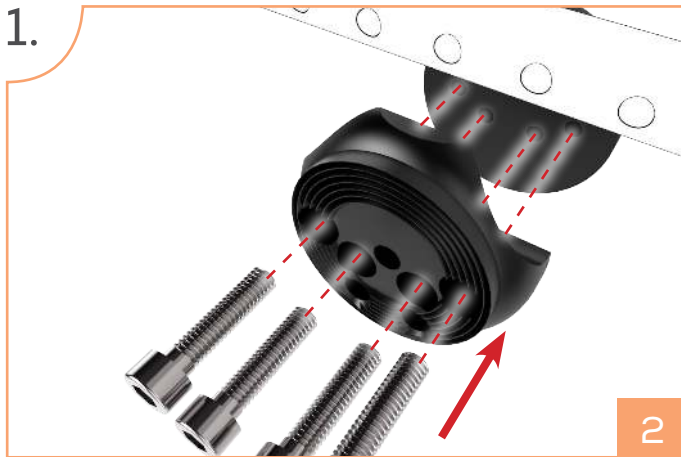
M3D-Base Adapter 90°

Tip: use the 90° adapter to mount a tube at an angle instead of parallel to the frame.

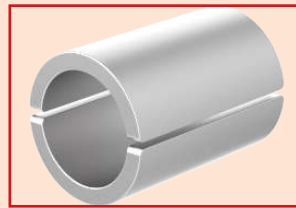


E

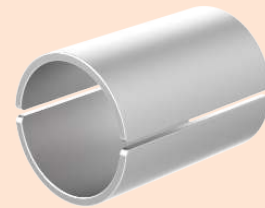
Base clamp for round frames



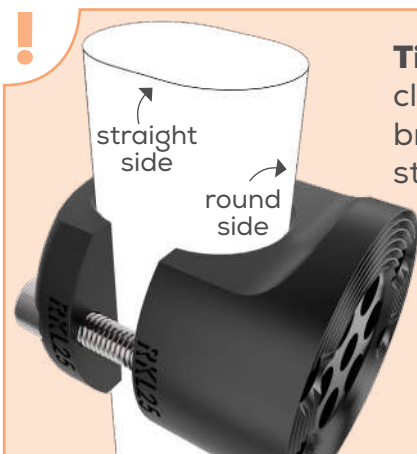
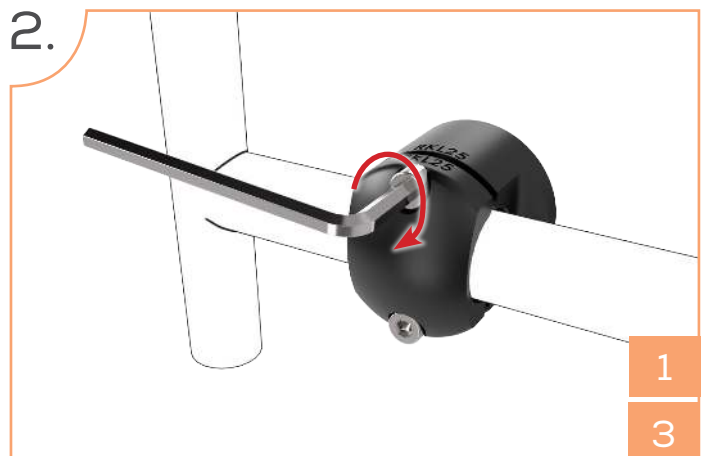
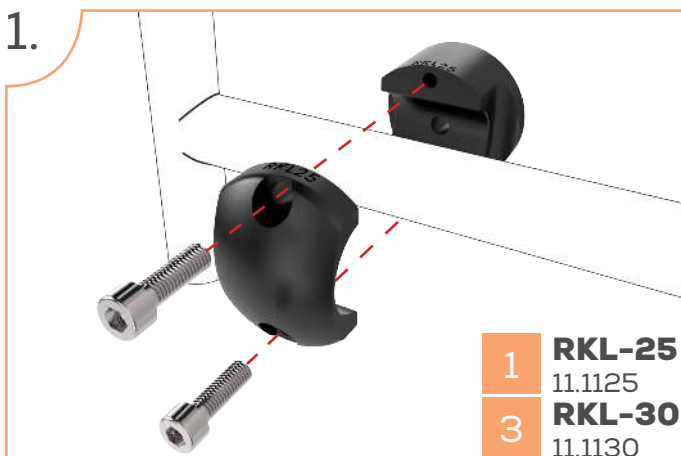
Warning: do not use sleeves in combination with semi-open clamps. Sleeves are only suitable for standard round clamps (e.g. RKL-25).



4 **Sleeves 19**
01.2519

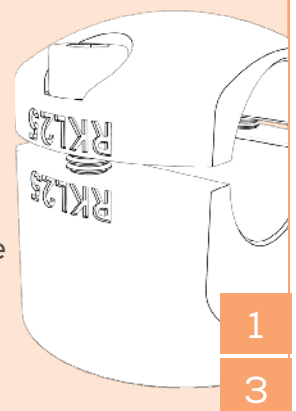


5 **Sleeves 22**
01.2522



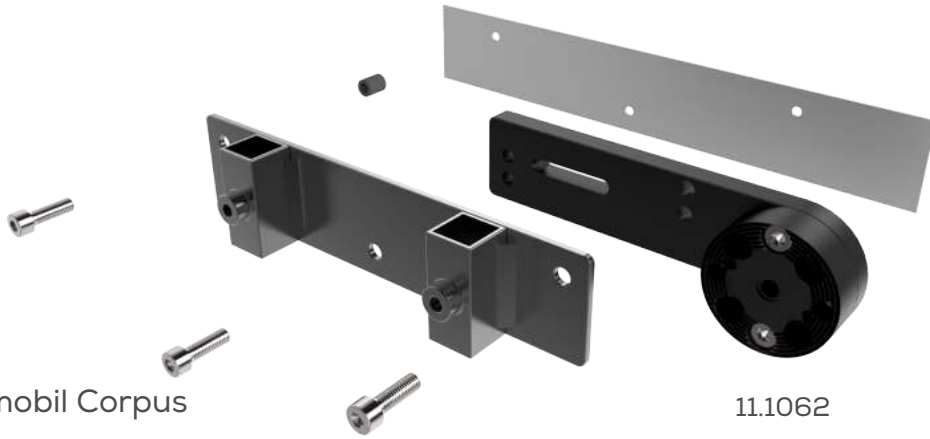
Tip: apply our RKL-25 frame clamp even for oval tubes to bridge the distance on the straight side.

Tip: to avoid confusion we have engraved the name of the clamps on both parts of every clamp.



Base clamp for Permobil wheelchairs

1.



for the Permobil Corpus

11.1062

7

2.

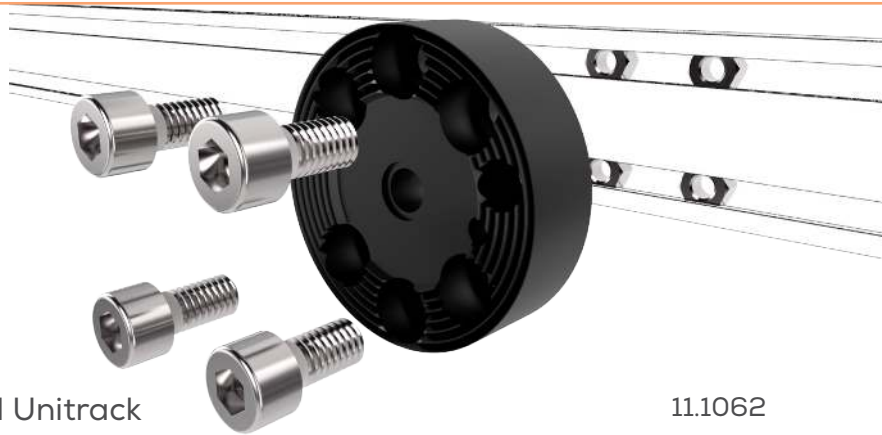


for the Permobil Miniflex

11.1062

7

3.

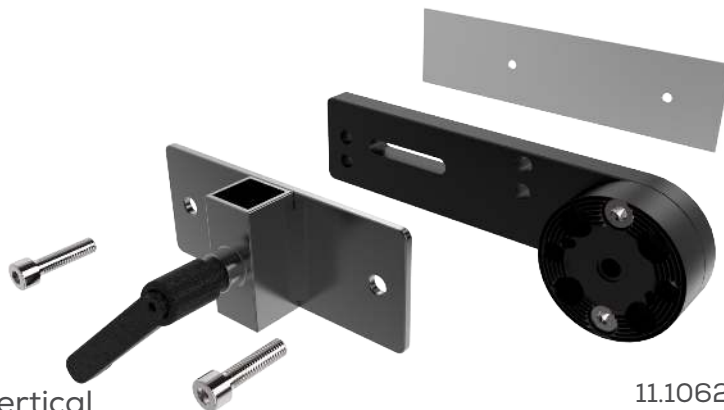


for the Permobil Unitrack

11.1062

7

4.



for the Permobil Vertical

11.1062

7

1.



6 Replacement Kit
11.1260

Tip: see an instruction video on how to replace the QuickShift lever by scanning the QR code below or visiting <https://rehadapt.com/replacing-quickshift-lever/>

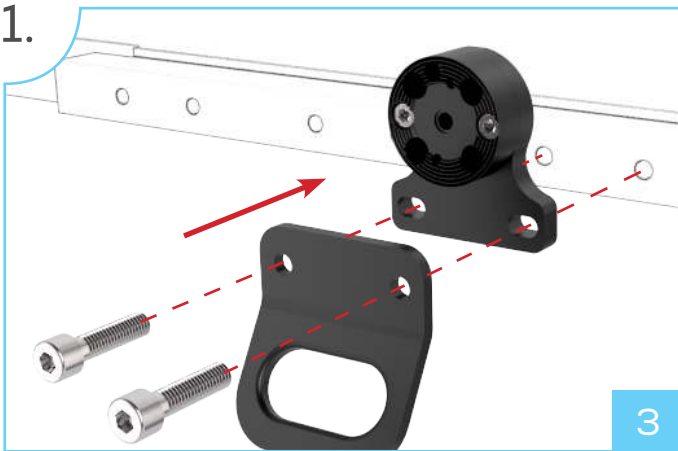


6

F

Base clamp for threaded holes

1.

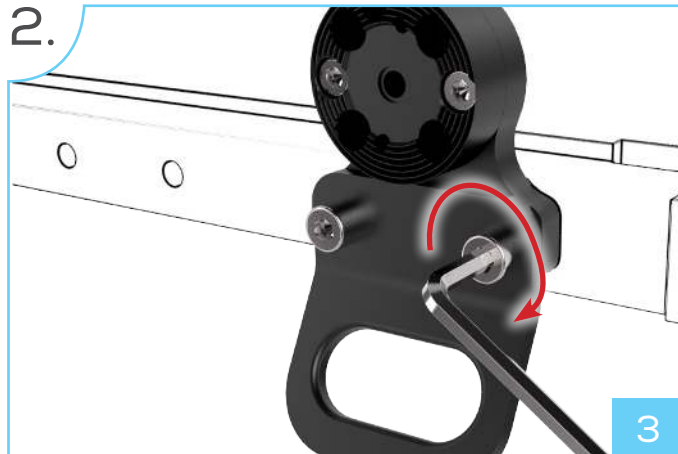


1.



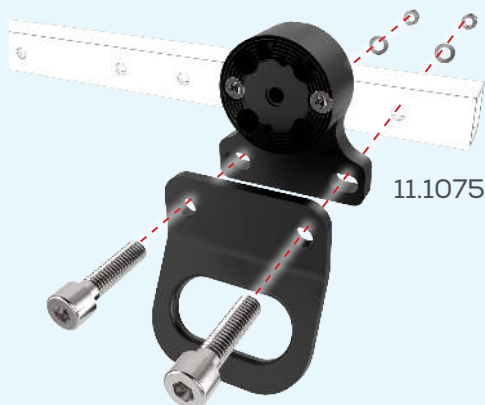
- 1 **Spacer 1"**
11.1525
- 2 **Spacer 1 ½"**
11.1538

2.



Tip: to achieve a larger distance you can combine multiple offset spacers.

!



11.1075

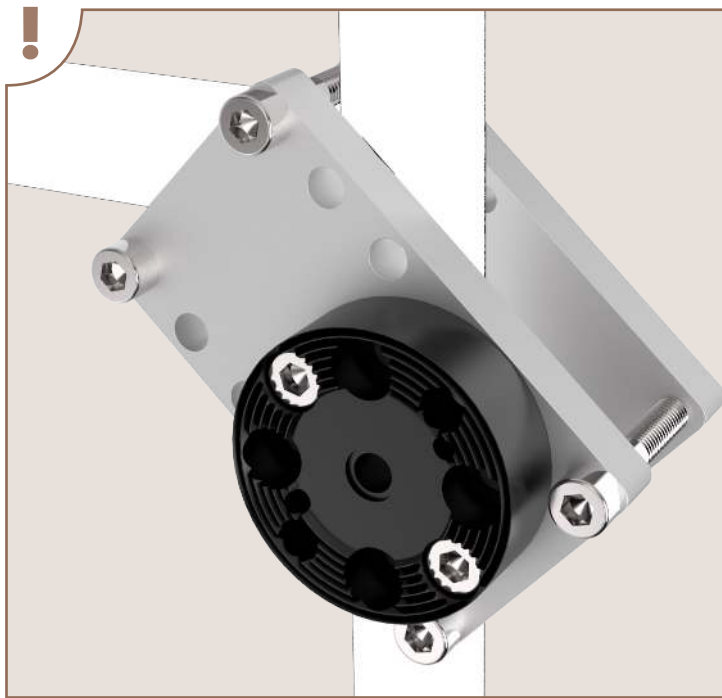
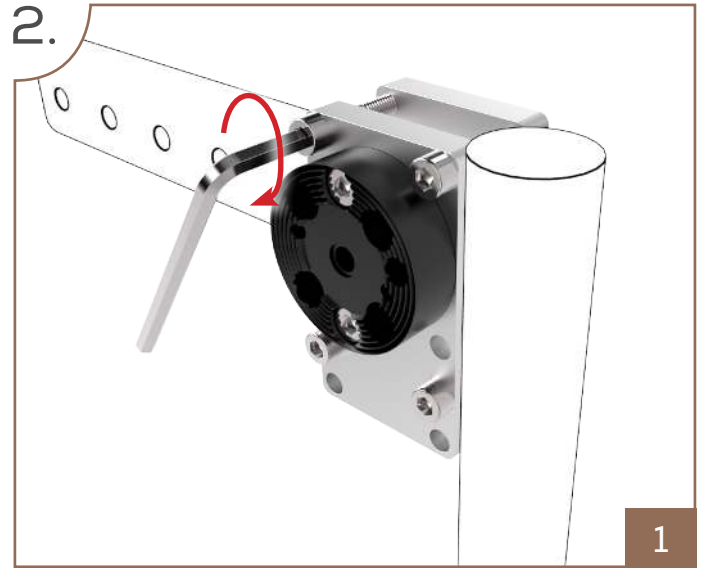
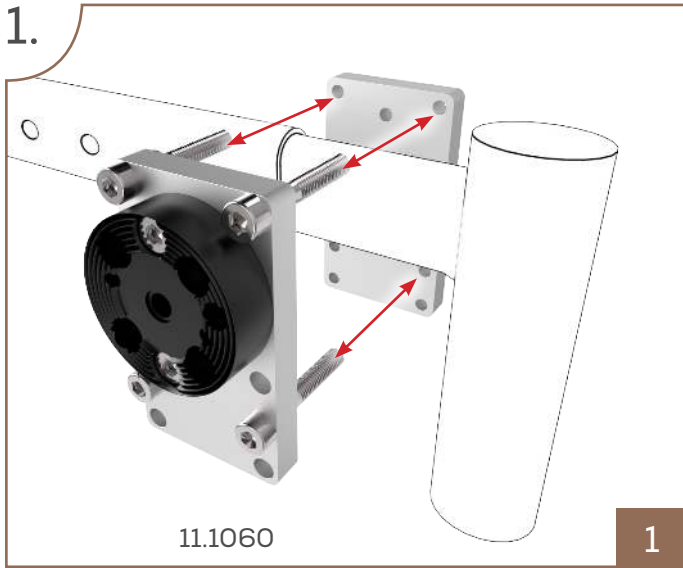
Warning!

Although attachment points of tie-down brackets are very stable spots to mount to, removing of the tie-downs can affect the safety of the wheelchair and should only be done by the wheelchair provider!

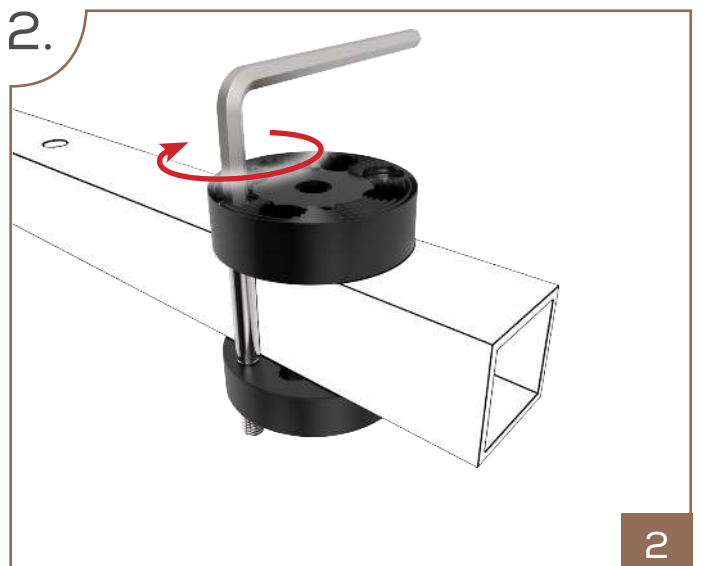
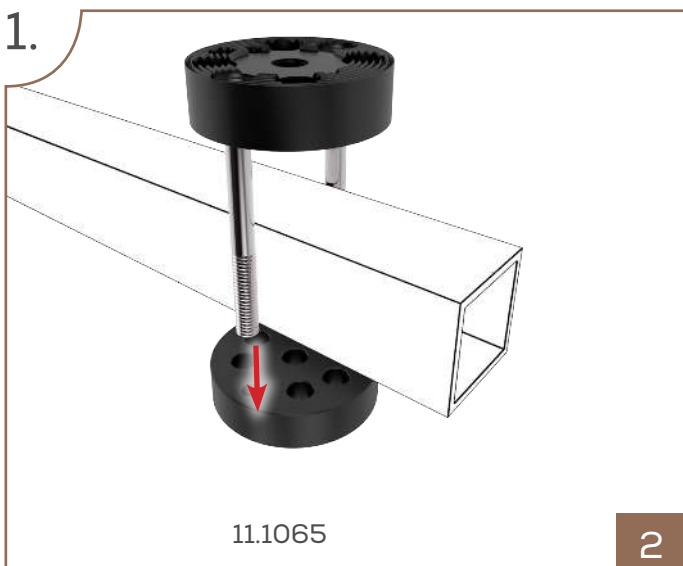
3

G

Base clamp for rectangular frames



Tip: this special frame clamp is not only suitable for rectangular wheelchair elements. You can also reliably mount to a t- or x-shaped crossing of wheelchair tubes.



Which clamp should I use?

Measure the tube diameter

Use the caliper or Rehadapt's measuring Post-It to measure the diameter of the tube where the clamp will be mounted.



If the diameter is 25 mm (1") or 30 mm (1 3/16"), use the frame clamp RKL-25 or RKL-30, respectively.

If the diameter is 19 mm (3/4") or 22 mm (7/8") use the sleeves 25>19mm or 25>22mm in combination with the RKL-25.

If the diameter is a different one, order a new clamp. Sizes over 25 mm (1") are readily available. For diameters smaller than 25 mm (1") use the RKL-25 in combination with sleeves.

How do I use the Measuring Post-Its?



#1 Wrap the Post-It around the tube starting with the edge labeled "Start here".



#2 Mark the overlapping edges.



#3 Roll out the Post-It and see the diameter in millimeters and inches.

J

How do I change bolts or clamping levers?

Here is a little physics. The goal of every mount is to tighten all joints and clamps without applying superhuman force to the bolts and levers. Still the joints and clamps need to hold very tight and withstand a lot of force.

Unfortunately most of the torque applied to any bolt gets lost due to the friction on the thread or the screw head, instead of building up the desired axial clamping force. The mount can only be stable when this loss is minimized. We reach this by:

- a) Lubricating the threads with a special grease to reduce the friction;
- b) Always using two washers under the screw/threaded clamping lever head (acting as a bearing, reducing the head friction).

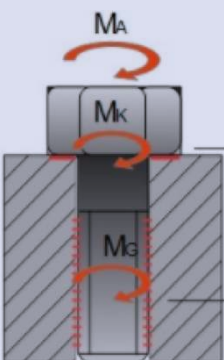
When changing bolts or clamping levers, it is crucial to follow these rules:

1. Always degrease/clean the threads of removed screws/levers using the alcohol wipes. Failure to do so will result in collecting dirt particles, which will damage the thread during next application.
2. Make sure that you apply two washers with any new screw or lever.

How do I clean a joint / clamp?

When disassembling a joint/clamp, it is important to avoid any foreign particles on the contact surfaces. If necessary, use the alcohol wipes to clean the surfaces.

If you notice that the coating of the surfaces is scratched and there are significant silver parts visible (see image below), the connection will not have enough friction. When this happens, the joint or clamp must be replaced.



The diagram shows a cross-section of a screw head and thread. It labels three torque components: M_A (axial torque), M_k (clamping torque), and M_g (thread torque). It also identifies two friction points: 'Friction on the screw head' and 'Friction on the screw thread'.

Important:

- don't forget the washers (act like a sliding bearing)
- lubricate screw threads
- always pay attention to clean and intact threads (please also degrease when changing)

3. Add two drops of grease onto the first third of the thread of the new element (nowhere else!).

4. Screw in the new element TIGHTLY. Don't be shy, work that lever or T-handle Allen wrench!

Always pay attention to the condition of the threads. If threads of screws or levers are damaged, the counterpart in the joint will not be intact as well. This element needs to be replaced.



The image shows two black plastic clamping levers. To the right is a tube of OKS 250 grease, which is crossed out with a large red 'X', indicating that it should not be used on these surfaces.

Important: Never apply any lubricant on these contact surfaces. Lubricant is meant for bolts and threads only!

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ID	Part No.	Name	Quantity	Reorder
A 1	01.0032	Caliper	1	
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B 2	01.0002	Allen Key 3 mm	1	
B 3	01.0029	Allen Key 4 mm	1	
B 4	01.0014	Allen Key 5 mm	1	
B 5	01.0437	Allen Key 7/32"	1	
B 6	01.0436	Allen Key 3/32"	1	
B 7	01.0435	Screwdriver	1	
B 8	01.0874	Wrench Holder	1	
C 1	01.5005	Tube Ø22,2x200	2	
C 2	01.5010	Tube Ø22,2x300	2	
C 3	01.5020	Tube Ø22,2x400	2	
C 4	01.5030	Tube Ø22,2x500	1	
C 5	01.5032	Tube Ø22,2x600	1	
D 1	11.1074	M3D Adapter Ring	1	
D 2	11.1069	T-Nut	1	
D 3	02.0006	Box (Large)	1	
D 3.1	11.1069BS2	T-Nuts for 16/9	1	
D 3.2	11.1066BS1	T-Nuts for 23/7	1	
D 3.3	11.1077BS1	T-Nuts for 10/4	1	
D 3.4	11.1072BS2	Item P5	1	
D 3.5	11.1074BS1	Screw Set Adapter	1	
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E 2	11.1425	RKL-T25	1	
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E 5	01.2519	Sleeves 25>19	2	
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F 3	11.1075	RKL-M8-Mini	1	
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I 1	01.5500	Slip-Out-Safeguard	2	
I 2	01.0109	Bushing FloatArm	1	
I 3	01.5999	Ribbed Inserts Ø22	4	
I 4	01.0283	FS Bolthead Cover	4	
I 5	01.0106	Foot for TS-XL	4	
J 1	01.0078	Alcohol Wipes	6	
J 2	04.0012	OKS Lubricant	1	
J 3	02.0005	Box (Small)	1	
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J 3.3	01.0520	Bolts M5x20	5	
J 3.4	01.0835	Bolts M8x35	5	
J 3.5	01.0820	Bolts M8x20	5	

Company / Name
Address / Stamp



Rehadapt Engineering GmbH & Co. KG
Heinrich-Hertz-Str. 104, 34123 Kassel, Deutschland
Postfach 20 03 01
Telefon: +49 561 220 717 0
Fax: +49 561 220 717 99
Email: techteam@rehadapt.com

Rehadapt North America
7619 A1A South St. Augustine
FL 32080
Telefon: 904.687.0130
Fax: 904.342.6278
Email: office.na@rehadapt.com